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AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions of claims in the application.

Claims 1-21 (Cancelled)

22. (Currently amended) A data collection device scan engine image sensor assembly, comprising:

an image sensor that senses a bar code and generates a pixel data pattern, the image sensor includes contacting having an aperture window and being operative to sense senses light entering the aperture; and

a prism mounted on the aperture ~~window~~ and adapted to receive light along a first path and to provide at least a portion of the received light to the aperture ~~window~~ along a second path; and

a lens mounted along the first path between the bar code and the prism to facilitate directing the light from the bar code to the prism, such that the light enters a first surface of the lens without impacting an intermediate lens, and exits the lens directly to the prism.

Claims 23-24 (Cancelled)

25. (Currently amended) The assembly of claim 22, wherein the prism comprises a first planar face adapted to receive light along the first path, and a second planar face adhered to the aperture ~~window~~ using a low loss transparent adhesive.

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26. (Currently amended) A scan engine for use in a data collection device, comprising:

- a housing having an opening for receiving light from a scanned dataform;
- an image sensor located in the housing and having an aperture, which image sensor senses the dataform through the aperture by converting the dataform into a pixel-by-pixel representation, the image sensor includes having an aperture window, the image sensor being located within the housing and operative to sense light entering the aperture window; and
- a prism mounted onto the aperture window of the image sensor to receive light from the opening along a first path and to provide at least a portion of the received light to the aperture window along a second path; and
- a lens mounted within the housing along the first path between the opening and the prism to facilitate directing the light from the opening to the prism, such that the light enters a first surface of the lens without impacting an intermediate lens, and exits the lens directly to the prism.

27. (Previously presented) The scan engine of claim 26, wherein the second path is at an angle with respect to the first path.

28. (Previously presented) The scan engine of claim 26, wherein the second path is perpendicular to the first path.

29. (Currently amended) The scan engine of claim 26, wherein the prism comprises a first planar face generally perpendicular to the first path and a second planar face generally perpendicular to the second path, and wherein the second face is mounted on the aperture window of the image sensor.

30. (Previously presented) The scan engine of claim 26, wherein the first face of the prism is located proximate the opening in the housing.

Claim 31 (Cancelled)

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Claims 32-33 (Cancelled)

34. (Previously presented) The scan engine of claim 26, further comprising a printed circuit board mounted in the housing.

35. (Previously presented) The scan engine of claim 34, wherein the image sensor is mounted on the printed circuit board.

36. (Previously presented) The scan engine of claim 26, further comprising a window coupled to the opening of the housing, such that the window provides a seal between an interior and an exterior of the housing.

37. (Previously presented) The scan engine of claim 26 being employed in a bar code reader.

38. (Currently amended) A method for producing a data collection device scan engine, comprising:

providing a housing with an opening for receiving light from a scanned dataform;
mounting an image sensor within the housing, the image sensor having an aperture window, ~~and being operative to sense~~ senses light entering the aperture, the image sensor converts the scanned dataform into a pixel data pattern; and

mounting a prism onto the aperture-window of the image sensor that receives
~~receiving~~ light from the opening along a first path and ~~provides~~ providing at least a portion of the received light to the aperture window along a second path; and

providing a lens in the first path between the opening and the prism to facilitate directing the light from the opening to the prism, such that the light enters a first surface of the lens without impacting an intermediate lens, and exits the lens directly to the prism.

39. (Currently amended) The method of claim 38, wherein the prism comprises a first planar face generally perpendicular to the first path and a second planar face generally perpendicular to the second path, the second planar face being mounted on the aperture window.

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40. (Currently amended) The method of claim 39, wherein mounting the second face on the aperture ~~window~~ includes adhering at least a portion of the second face of the prism to the aperture ~~window~~ using a transparent low loss adhesive.

41. (Previously presented) The method of claim 38, further comprising mounting a printed circuit board to the housing of the scan engine.

42. (Previously presented) The method of claim 38, wherein mounting the image sensor within the housing includes mounting the image sensor to a printed circuit board located in the housing.

43. (Currently amended) A data collection device scan engine image sensor assembly, comprising:

an image sensor having an aperture ~~window~~ and being operative to sense ~~that~~ senses light entering the aperture of a dataform window, the image sensor converts the light into a pixel-by-pixel representation for transmission therefrom; and

a prism mounted on the aperture ~~window~~ of the image sensor, ~~the prism and~~ adapted to receive receives light along a first path and to provide provides at least a portion of the received light to the aperture window along a second path; and

a lens positioned along the first path to facilitate directing the light from the opening to the prism, such that the light enters a first surface of the lens without impacting an intermediate lens, and exits the lens directly to the prism.

44. (Currently amended) The assembly of claim 43, wherein the prism comprises a first planar face adapted to receive light along the first path, and a second planar face adhered to the aperture ~~window~~ of the image sensor using a low loss transparent adhesive.

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45. (New) A product code scan engine, comprising:
- a housing having an opening for receiving light from a scanned dataform;
 - an image sensor located within the housing and having an aperture, the image sensor senses light from the dataform through the aperture by converting the dataform into a pixel-by-pixel representation;
 - a prism mounted onto the aperture of the image sensor to receive light through the opening along a first path and to provide at least a portion of the received light to the aperture along a second path; and
 - a lens mounted within the housing between the opening and the prism along the first path to facilitate directing the light from the opening to the prism.
46. (New) A bar code reading engine, comprising:
- a housing with an opening for receiving light from a scanned bar code;
 - means for mounting an image sensor within the housing, the image sensor having an aperture and that senses light entering the aperture, the image sensor converts the scanned dataform into a pixel data pattern representative of the bar code;
 - means for mounting a prism on the aperture of the image sensor, which prism receives light from the opening along a first path and redirects at least a portion of the received light to the aperture along a second path; and
 - means for providing a lens in the first path between the opening and the prism to facilitate directing the light from the opening to the prism, such that the light enters a first surface of the lens without impacting an intermediate lens, and exits the lens to the prism without being altered therebetween.
47. (New) The engine of claim 46, further comprising means for mounting a printed circuit board mounted in the housing.
48. (New) The engine of claim 47, Further comprising means for mounting the image sensor on the printed circuit board.

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49. (New) The engine of claim 46, further comprising means for coupling a window to the opening of the housing, such that the window provides a seal between an interior and an exterior of the housing.